

What Is Claimed Is:

1. An inter-computer data transfer method for transferring data between a plurality of computers each including a main storage device, a processor for issuing a communication process command and a communication device for processing the communication command from said processor and communicating with another one of said computers through a switched network, comprising the step of:

each of a transmission section and a reception section of said communication device including a translation look aside buffer for retaining a plurality of translation look aside buffer entries;

determining, when a communication command including information of that one of the computers which is a sending source is issued from said processor, one of the translation look aside buffer entries which is to be used in accordance with the computer of the sending source by means of said reception section.

2. An inter-computer data transfer method as claimed in claim 1, wherein said transmission section of said communication device produces a communication packet including the information of the computer of the sending source and transmits the communication packet to another one of said computers.

3. An inter-computer data transfer method as claimed in claim 1, wherein the number of communication commands to be processed simultaneously to the same destination computer from

the computer of the sending source is limited by said communication device.

4. An inter-computer data transfer method as claimed in claim 2, wherein an identification number of a processing command  
5 in the computer of the sending source is applied to a communication packet by said communication device, and for different communication packets which have the same identification number of the processing command, the same translation look aside buffer entry is used by said reception  
10 section of said communication device.

5. An inter-computer network system, comprising:  
a plurality of computers connected to each other through a switched network;

each of said computers including a main storage device,  
15 a processor for issuing a communication processing command, and a communication device for processing the communication command from said processor and communicating with another one of said computers through said switched network;

said communication device including a transmission  
20 section for transmitting a communication to said switched network and a reception section for receiving a communication from said switched network;

each of said transmission section and said reception section including a translation look aside buffer for retaining  
25 a plurality of translation look aside buffer entries;

said processor issuing the communication command which

includes information of that one of the computers which is a sending source;

said reception section determining one of the translation look aside buffer entries which is to be used in accordance  
5 with the computer of the sending source.

6. An inter-commuter network system as claimed in claim 5, wherein said transmission section produces a communication packet including the information of the computer of the sending source and transmits the communication packet to another one  
10 of said computers.

7. An inter-commuter network system as claimed in claim 5, wherein said communication apparatus limits the number of communication commands to be processed simultaneously to the same destination computer from the computer of the sending  
15 source.

8. An inter-commuter network system as claimed in claim 6, wherein said communication apparatus applies an identification number of a processing command in the computer of the sending source to a communication packet, and said  
20 reception section uses the same translation look aside buffer entry for different communication packets which have the same identification number of the processing command.

9. An inter-computer network system according to claim 6, wherein said transmission section of said communication  
25 device extracts a communication command from said main storage device in accordance with an instruction from said processor,

converts a logical address of data of the sending source in the communication command into a physical address, extracts transmission data from said main storage device, produces a communication packet from the extracted data and the communication command and transmits the communication packet to the destination computer.

10. An inter-computer network system as claimed in claim 5, wherein said reception section of said communication device receives a communication packet from said switched network, converts a destination logical address into a destination physical address for said main storage device and writes data in the communication packet into the destination physical address.

11. An inter-computer network system as claimed in claim 6, wherein the communication packet includes a command code for setting a communication command, a destination computer number for setting a destination computer number for the communication command, a process number representative of a process of a communication opposite party for setting the destination process number of the communication command, a destination logical address representative of a writing destination of the data in the destination process for setting the destination logical address for the packet, a data length for setting a length of data of the packet, a sending source computer number for identification of a sending source for setting a sending source computer number of the communication

command, and data to be written into the destination.